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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/674,469	02/26/2001	Andrew John Cardno	6813	1243

25763 7590 02/06/2004.

DORSEY & WHITNEY LLP  
INTELLECTUAL PROPERTY DEPARTMENT  
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MINNEAPOLIS, MN 55402-1498

EXAMINER

OUELLETTE, JONATHAN P

ART UNIT	PAPER NUMBER
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3629

DATE MAILED: 02/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/674,469

Applicant(s)

CARDNO ET AL.

Examiner

Jonathan Ouellette

Art Unit

3629

mw

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,47,48,50-64,66-80 and 82-104 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,47,48,50-64,66-80 and 82-104 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. Claims 2-46, 49, 65 and 81 have been cancelled, and Claims 96-104 have been added; therefore, Claims 1, 47-48, 50-64, 66-80 and 82-104 are currently pending in application 09/674,469.

### ***Priority***

2. Receipt is acknowledged of papers filed on 10/31/2003 purporting to comply with the requirements of 35 U.S.C. 119(a)-(d) and they have been placed of record in the file.

### ***Claim Objections***

3. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered Claim 91 (b) has been renumbered to Claim 92.

4. Claims 91 and 92 are objected to because of the following informalities: Claims 91 and 92 are the exact same claim. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. **The rejection of Claims 1, 47-51, 59, 60, 63-67, 75, 76, 79-83, 91, 92, and 95 under 35 U.S.C. 102(b) is withdrawn due to applicant's arguments.**
7. **Claims 1, 47-51, 59, 60, 63-67, 75, 76, 79-83, 91, 92, and 95-104 are rejected under 35 U.S.C. 102(a) as being anticipated by ESRI (www.esri.com, retrieved from Internet Archive Wayback Machine <www.archive.org>, Date Range: 2/15/1998-7/5/1998).**
8. As per independent Claims 1, 47, 63, 79, 96, 99, and 102, ESRI discloses a data visualization system (method, computer program) comprising: a data value memory in which is maintained a finite set of data values; a display (means) arranged to display a representation of each data value centered on respective data points; and a contour generator arranged to generate and display one or more contour lines representing a surface in which each data point is displayed as a local maximum. (www.ESRI.com).

9. As per Claims 48, 64, 80, 97, 100, and 103, ESRI discloses a memory in which is maintained an interaction database of interaction data representing interactions between customers and merchants; and a retrieval device arranged to retrieve from the interaction database data representing interactions between customers and merchants, to construct the finite set of data values from the retrieved data and to store the data values in the data value memory.
10. As per Claims 50, 66, and 82, ESRI discloses wherein the merchant operates from one or more commercial premises, the display further arranged to display a graphical spatial representation of the premises of the merchant.
11. As per Claims 51, 67, and 83, ESRI discloses wherein the merchant sells a range of products to customers, each product having a product code, the interaction data comprising a product code for each interaction.
12. As per Claims 59, 75, and 91-92, ESRI discloses wherein the merchant operates from one or more web sites which are accessed by customers over a computer network, the display further arranged to display a graphical representation comprising a graphical web sit map of a merchant.
13. As per Claims 60, and 76, ESRI discloses wherein the display is further arranged to display an area map showing the origin of customers in merchant customer interactions.
14. As per Claim 95, ESRI discloses wherein the data visualization computer program is embodies on a computer readable medium.

15. As per independent Claims 98, 101, and 104, ESRI discloses a data value memory in which is maintained a finite set of data values; a display arranged to display a representation of each data value centered on respective data points; and a contour generator arranged to generate and display one or more contour lines at least partially around each data point or group of data points, each contour line representing data values that are less than the data value(s) of the data point(s) around which the contour line is displayed (www.ESRI.com).

***Claim Rejections - 35 USC § 103***

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**17. Claims 52-58, 61, 62, 68-74, 77, 78, 84-90, 93, and 94 are rejected under 35 U.S.C. 103 as being unpatentable over ESRI.**

18. As per Claims 52-58, 61, 62, 68-74, 77, 78, 84-90, 93, and 94, ESRI does not expressly show wherein the merchant operates a casino or gaming venue (a wagering or betting service provider, a financial or insurance services provider, a reservation of products or services, one or more manufacturing process/stages, telecommunications service provider, and a sports event) comprising one or more business units, each

Art Unit: 3629

business unit having a business unit identifier, the interaction data comprising a business unit identifier for each interaction.

19. However these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. The data visualization system (method, computer program) would be performed regardless of the type of merchant of business unit identifier used. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, *see In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).
20. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the data visualization system with a casino or gaming venue, a wagering or betting service provider, a financial or insurance services provider, a reservation of products or services, a manufacturing facility, telecommunications service provider, or a sports event (with respective business unit identifiers), because such merchants (business unit identifiers) do not functionally relate to the steps in the method claimed and because the subjective interpretation of the merchants (business unit identifiers) do not patentably distinguish the claimed invention.

***Response to Arguments***

21. Applicant's arguments filed 10/31/03, with respect to Claims 1, 47-48, 50-64, 66-80 and 82-95, have been considered but are moot in view of the new ground(s) of rejection.
22. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
23. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

***Conclusion***

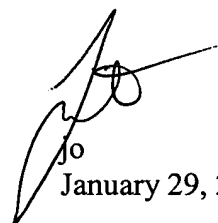
24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Ouellette whose telephone number is (703)



605-0662. The examiner can normally be reached on Monday through Thursday,  
8am - 5:00pm.

25. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on (703) 308-2702. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-3597 for After Final communications.

26. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-5484.



January 29, 2004



JOHN G. WEISS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600